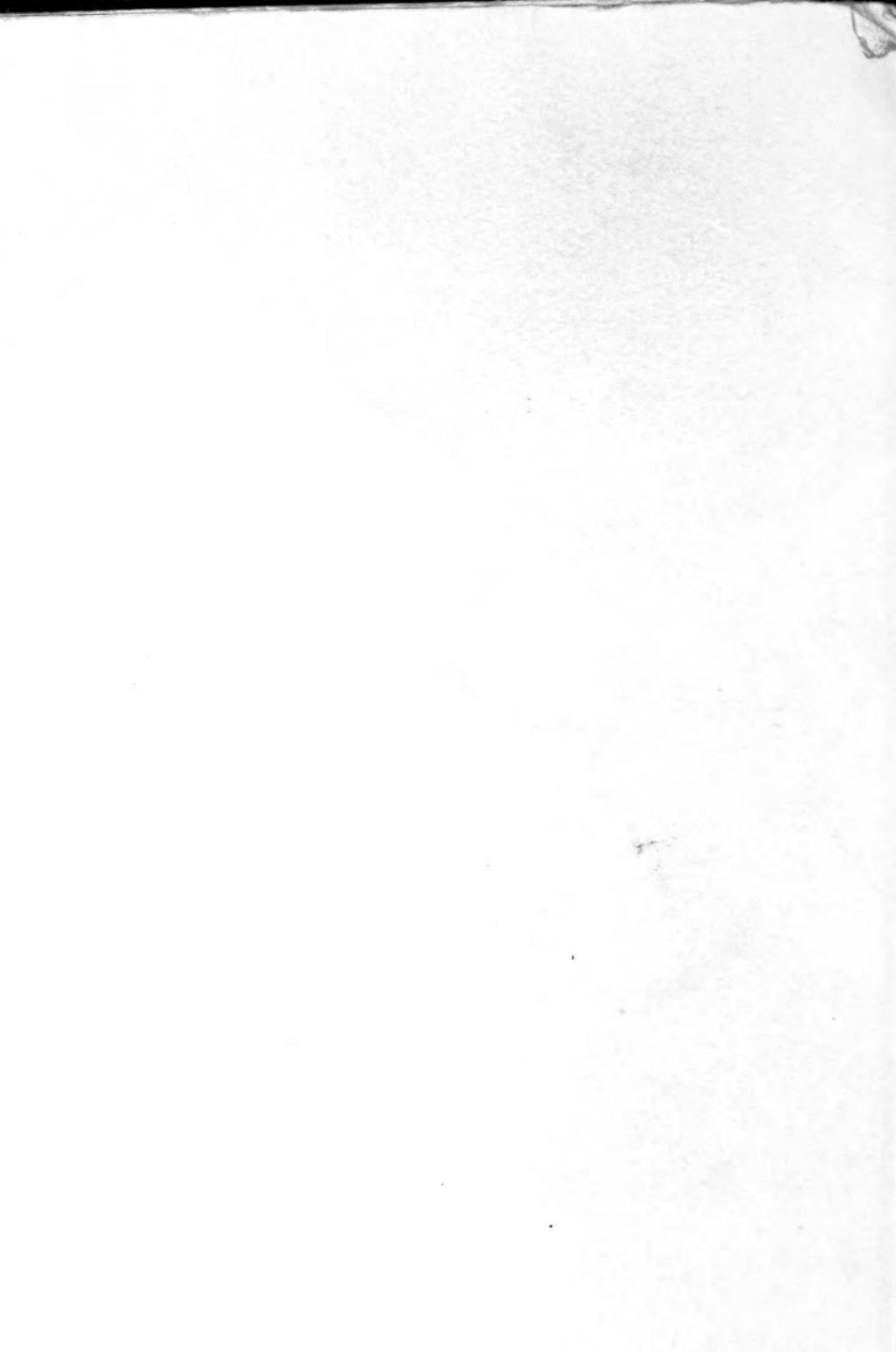


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U. S. DEPARTMENT OF AGRICULTURE

Some

PLAIN FACTS

about

THE FORESTS

U. S. Department of Agriculture
Forest Service

Miscellaneous Publication No. 543

This Nation's forests are not being grown as fast as they are being depleted. We have been using up our growing stock of timber and failing to make adequate provision for new growth. Timber cut or destroyed in 1943 was 50 percent more than total growth.

While the present forest situation is serious, it is by no means hopeless. Forests are a renewable resource; with proper management and protection they can be made to produce continuing crops. But if we are to be assured of abundant and permanent timber supplies, positive action will have to be taken on a nation-wide scale to raise annual timber growth to an adequate level.

Washington, D. C.

**Issued April 1944
Slightly revised March 1945**

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SOME PLAIN FACTS ABOUT THE FORESTS

If we heard that the United States had been invaded and that the productive capacity of millions of acres of our land was jeopardized by the enemy, we would be greatly alarmed. Yet something very much like that is actually happening. The enemy in this case is our own carelessness and neglect, and it is jeopardizing the productive capacity of the Nation's forests. Because of our neglect and our failure to adopt adequate conservation measures, our forests are not being grown as fast as we are depleting them. If we fail to gain some understanding of the importance of forests to national welfare and the necessity for keeping them permanently and adequately productive, an important element in knowledge essential to citizenship will be lacking.

Much information on forest resources and their utilization has been made available. Unfortunately some of this contains statements which result in confusion or misunderstanding in the mind of the public on the actual forest situation. Some even tends to promote the idea that there is nothing to worry about; to spread the idea that forest destruction and deterioration are negligible problems, and that good forestry is now so generally and widely practiced that the Nation is sure to have ample future timber supplies. Such information is definitely misleading.

The advances made in forest conservation both by public agencies and by progressive industrial and private



operators merit attention as praiseworthy steps in the right direction. However, we must face realistically the facts of continuing and unnecessary forest deterioration. For us to gloss over the unpleasant facts of the situation will not help in achieving the necessary corrective action.

The following questions and answers, it is hoped, will help to improve the general understanding of the forest situation. The information herein is based on numerous surveys, studies, and careful analyses made by the United States Forest Service.

PLENTY OF TIMBER?

1. Why doesn't plenty of forest land mean plenty of timber?

The fact that one-third of the area of the United States is forest land has been cited to indicate that there will always be an abundance of timber. But



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WASTE LAND. Some 77 million acres have become virtually nonproductive as a result of destructive cutting and fire.

it does not follow that forest land necessarily means productive timberland. Of some 630 million acres of forest land in the United States, approximately 168 million acres is of noncommercial types—that is, alpine, semidesert, chaparral or other forest land types not suited or not available for growing timber of commercial quality or quantity, although much of it is valuable for watershed protection, grazing, wildlife, or other purposes. Of the 462 million acres of commercial forest land, some 77 million acres is virtually nonproductive as a result of destructive cutting and fire. Of the remaining area all but about 100 million acres has been cut over, and a large part of this cut-over land is now producing at only a fraction of its potential capacity.

The amount of usable wood that can be supplied annually does not depend upon the acreage and character of the land alone. It depends fully as much on the character of the growing stock, i. e., the number of remaining trees large enough and of the proper kinds to produce good sawlogs, piling, pulpwood, etc., in a short time. Therefore, our growing stock, or forest "capital," must be maintained if it is to yield regular "interest" in the form of usable products.

We cannot continue indefinitely to allow this forest capital upon which future growth of useful timber depends to melt away. Not only must adequate new growth be assured on areas cut over, but thrifty young trees up to and including the sizes of good quality saw timber must be retained as growing stock. The decline in productive growing stock is most notable in the East and South, where thrifty young stands are being cut indiscriminately. Throughout the East, which contains three-fourths of the Nation's commercial forest area, forest growing stocks are generally below the level needed to sustain the current rate of cutting. War demands for forest products have accelerated the needless destruction of rapidly growing young timber throughout the country.

2. How does our present supply of timber compare with that of the past?

It has been said that almost as much usable timber is still standing as has been cut for lumber since the birth of the Nation. Such a statement is misleading. The significant fact is the uninterrupted trend of forest depletion which has deprived community after community of the benefits of permanent forest industries.

The amount of wood removed from American forests for lumber is only a fraction of the total taken. Even greater amounts have been removed for nonlumber products such as pulpwood, posts, poles, piling, hewn cross ties, mine props, building logs, and fuel wood. In addition, enormous quantities of timber in earlier years were simply felled and burned in clearing land for cultivation, or were and are still being destroyed by fire, storms, and epidemics.

It was estimated in 1909 that the total volume of saw timber in the forests of the United States was 2,826 billion board feet.¹ In 1938 the estimated total stand of saw timber was 1,764 billion board feet.² Recognizing that the 1938 estimate included species and stands not considered merchantable in the earlier estimate, it is safe to say that **the total volume of standing saw timber in the United States was reduced almost 40 percent in 30 years.**

Another important consideration is that the quality of the second-growth timber is generally much inferior to that of the original stands. Most of the available high-quality old-growth timber is confined to relatively small parts of the Pacific Coast States, and can be supplied to consuming centers elsewhere only by long-haul, high-cost transportation. Furthermore, it was estimated in 1938 that possibly one-third of all our saw timber, chiefly in the West, is too inaccessible to be harvested at a reasonable cost.

¹ UNITED STATES DEPARTMENT OF COMMERCE AND LABOR. LUMBER INDUSTRY, PT. 1. STANDING TIMBER. Bur. Corp. Commr. Rpt., p. 14. 1911.

² UNITED STATES CONGRESS, SENATE, JOINT COMMITTEE ON FORESTRY. FOREST LANDS OF THE UNITED STATES. 77th Cong., 1st sess., Sen. Doc. 32, p. 39. 1941.

TIMBER GROWTH AND TIMBER DRAIN

3. Does current forest growth equal forest drain?

The fact that more than 11 billion cubic feet of new growth occurs in our forests each year has been referred to by some as an indication that we shall always have plenty. That was the estimated amount for 1936. But in 1936, generally considered a subnormal year, the total drain, i. e., timber cut or destroyed by fire, insects, disease, etc., on our forests amounted to $13\frac{1}{2}$ billion cubic feet. The excess of drain over growth is undoubtedly much greater today. **It is estimated that the drain on forests of the United States in 1943 amounted to nearly 17 billion cubic feet, and exceeded total growth by 50 percent. In timber of saw timber size drain was almost twice the annual growth.**

For several decades prior to and up into the depression years of the 1930's, there appears to have been an increase in annual forest growth. If such was the case, the increase was probably due to the development of organized fire protection, to the fact that there was no longer so much clearing of forests land for farming, and to new growth reaching merchantable size on eastern lands which had been taken out of cultivation several decades earlier. There is reason to doubt that any such trend is continuing. Growth in virgin forests of the West is slow and in general offset by decay and other losses. As these virgin stands are cut, such younger trees as come up will have more room and grow faster, but under present practices these growth increases are likely to be more than offset by continued depletion and deterioration of growing stock in the East.

It should be remembered also that much of the current drain is of high-quality old-growth timber, whereas much of the new growth is of greatly inferior quality.

4. Would forest growth equal forest drain if fires were stopped?

Adequate protection from fire, insects, and disease would save a tremendous volume of timber. But even if the 2 billion cubic feet per year loss from these causes were entirely eliminated (which is impossible) forest drain would still exceed growth by a substantial margin. Also the benefits of better protection may be largely offset by premature cutting of young growth.

Although extremely important, fire control and protective work against insects and diseases are by no means the sole or the main answer to the forest problem. More than that is needed if forest growth is to be stepped up sufficiently to meet our future requirements.



5. Why worry when only a small percentage of our timber is cut annually?

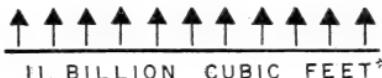
It has been said that because ordinarily only about 2 percent of our present stand of saw timber is cut for lumber in any one year, there is no need to worry; it should last another 50 years, even if no new timber were grown.

But such statement neglects the fact that the cut for lumber is only about 60 percent of the total drain on the saw timber of our forests. In 1942 the total cut for all purposes including pulpwood, fuel wood, and many other products, was estimated at 3.2 percent of our present total stand; and losses from fire, storms, insects, and disease add to the drain.

It should be noted also that in 1938 only about two-thirds of the estimated 1,764 billion board feet of remaining timber was considered accessible at reasonable cost. And we should remember that a large volume of

TIMBER GROWTH AND TIMBER DRAIN

NEW GROWTH



DRAIN ON
TIMBER



* EACH SYMBOL = 1 BILLION CU. FT.

TIMBER CUT OR DESTROYED IN 1943
WAS 50 PERCENT MORE THAN TOTAL GROWTH

timber must be kept as growing stock to sustain an adequate and uninterrupted output of commercial products. More than two-thirds of the remaining saw timber is concentrated in the West. The available timber in the East is not sufficient to maintain the present rate of cutting. And several decades are required to grow trees suitable for saw timber.

The drain on timber is serious enough for the Nation as a whole; for some communities it has been fatal. There the timber has been exhausted, and the communities hard hit as a result. Each year we hear of a number of sawmills closed down and dismantled because they are no longer able to get a satisfactory supply of logs. For a community primarily dependent on the forests, what satisfaction can it be to the people affected by the closing of a mill to know that nationally the cut is only 2 or 3 percent of the stand?

This does not mean that we should stop the cutting of either virgin timber or second growth. It does mean, however, that we can and should meet current needs with cutting practices and other measures that will assure adequate new growth.

With reasonably good management, our forest land eventually should be ample to produce continuously all of the wood that we are likely to need. There is no need for permanently curtail-

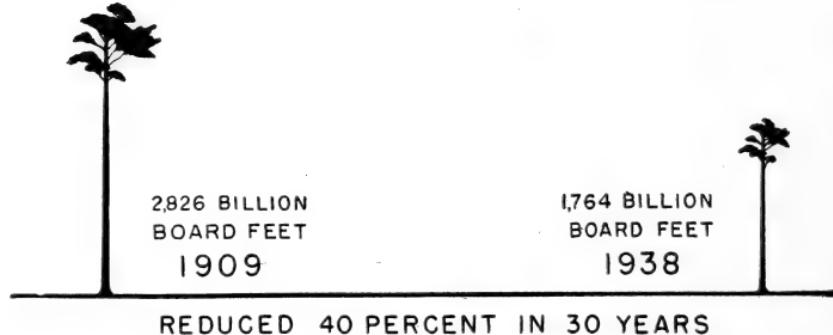
ing our consumption of wood, providing we take the necessary steps to produce it in abundance.

6. What shortages in forest products are there today, and why?

Wood has become a critical war material, with current production falling below essential war and civilian requirements. Labor shortage is probably the most immediate cause of lagging production, and equipment shortages, adverse weather conditions, and other factors have contributed. Yet back of all these current difficulties is the fact that our Nation has allowed much of its forest to deteriorate. We no longer have abundant saw timber supplies accessible throughout the country. We now have to search out isolated remnants of timber for specialty uses. For timber of high quality we have to depend too largely on the remaining virgin stands of the Pacific Coast. All this means further complication of labor problems, and increased burdens on transportation facilities.

Noteworthy is the shortage of large, high-quality, standing timber in yellow birch, yellow poplar, and Port Orford cedar. High-quality Sitka spruce for airplane lumber has become so scarce in Oregon and Washington that we had to tow logs in rafts 900 miles from Alaska to help meet demands. County-wide and

STANDING SAW TIMBER



State-wide searches have been made to locate suitable walnut for gun stocks. We are short, also, of the large high-quality oak needed for shipbuilding. Structural timbers of most species and long, wide timbers free from knots or other defects are increasingly difficult to obtain in the needed quantities. **Most of our higher-quality and specialty-type lumber comes from old-growth forests, which obviously are not as available today as previously.**

TREE PLANTING?

7. Will tree planting solve the problem?

We hear of millions of trees being planted in reforestation projects. Some conservation enthusiasts demand that 10 trees be planted for every 1 cut.

Even though Federal and State Governments maintain nurseries capable of producing hundreds of millions of trees, the combined planting by all agencies is covering only a small fraction of the area needing reforestation.

For instance, a cooperative forest-industry nursery developed in the Pacific Northwest with a capacity of 5 million seedlings per year has received much publicity. When an area is planted it usually means setting out approximately 800 trees to the acre. The five million seedlings produced by this nursery would thus provide for planting 6,000 acres per year. This is a laudable and encouraging beginning. But at this rate reforestation of all privately owned commercial timberland in the Northwest needing such treatment would require generations.



Much of our artificial reforestation is a rehabilitation measure to correct past mistakes. Millions of acres of denuded forest lands in the United States will need to be replanted if they are to be restored to productivity in any reasonable time. The National Resources Board has recommended a 25-year planting program covering 25 million acres. But even when an area is planted we have to wait 50 to 100 years or more before the seedlings grow into good-quality saw timber. So it is far more important to see to it that the kind of neglect and misuse which has made such reforestation necessary is not continued. With proper cutting and other forest practices, most of our existing forest stands can continue to yield merchantable timber at frequent intervals without the necessity of artificial reforestation.

8. What about "Tree Farms"?

The forest products industries of Washington and Oregon have launched a splendid movement for the establishment of tree farms—private timberland holdings to be managed on a continuing-crop basis. The tree farm idea is being promoted in several other States. Although it carries no guarantee of permanence and can not be expected to be universally adopted by the hundreds of thousands of forest land owners

the plan is highly commendable; if the principles of tree farming are fully carried out by those operators subscribing to the plan, the productivity of their lands will be maintained at a high level.

It is to be regretted that this plan at times has been described in terms which create the impression that it represents general prac-



tice on private lands. Although the movement is gaining ground, the number of owners adequately carrying out the tree-farm plan is still relatively small.

FOREST OWNERSHIP

9. Who owns our forests?

Of the Nation's 630 million acres of forest land, 196 million acres are in public ownership—community, State, and Federal—and 434 million acres are in private ownership. Of the commercial forest land—land capable of growing commercial timber crops and available for this purpose—approximately 120 million acres are in public ownership and 341 million acres in private ownership.

A major portion of the publicly owned forest land is in national forests administered by the United States Forest Service. On these lands scientific forestry is being applied and the forests are being managed for what foresters call sustained yield—that is, continuous production at a high level. Similar management is being applied to many of the forest lands in other Federal and State ownerships.

Publicly owned forest land, however, comprises only about one-fourth of the total commercial forest acreage. Generally, the most accessible, easily logged, and most productive forest lands are in private ownership.

About 40 percent of private forest lands is in farm ownership; another 40 percent is in small nonfarm holdings; and 20 percent is in industrial or other large holdings (5,000 acres or more).

Private lands include possibly 90 percent of the potential timber-growing capacity of the entire country. They furnish about 90 percent of the present cut of all forest products.

It is evident, therefore, that the Nation is primarily dependent upon private lands for its timber supplies. The public has a vital interest in the proper manage-

ment of these lands not only because we must look to them for the bulk of our timber supplies but also because they represent nearly two-thirds of the forest area where watershed protection problems are most critical, and are important to national welfare in many other ways.

10. How are our private forest lands being handled?

In every region a growing number of forest owners are using good forest practice. They protect and harvest their timber with an eye to future crops, thus demonstrating that such methods are practicable. But according to an estimate made in 1938, **80 percent of all cutting on private land is still done without conscious regard to future crops.**

This is partly due to lack of knowledge, partly to economic pressures, and partly to indifference; but re-



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FOREST-SUPPORTED COMMUNITY. Good forestry by the lumber company which is the main support of this town contributes to permanent homes.

gardless of the cause, this country cannot afford to allow destructive forest practices to continue. The public values are too great.

WHAT FORESTS MEAN

11. What interest has labor in forests?

More than a million workers and their families obtain their living directly from the forests—in work in the woods, in lumber and paper mills, and in wood-using industries. The forests contribute indirectly to the support of many millions more—for example, in the railroad and other transportation industries, in the construction industries, in water and power utilities, in retailing, in sporting goods manufacture, and in businesses serving tourists and recreation. Forest payrolls help to support many other industries and services.

Steady jobs in forest-supported industries can of course come only from steadily producing forests. The history of lumbering in the United States has been largely a matter of resource liquidation—taking out the



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ABANDONED LUMBER COMMUNITY. This community went to ruin when local timber supplies were exhausted.

timber and moving on to another region. To a large extent the forest worker has been forced to migrate from job to job, with little opportunity to settle down and have a real home.

It is to the interest of labor that our forests be managed for continuous production. **Producing forests mean jobs, steady income, happy home and community life. Forest deterioration and destruction mean unemployment, disrupted home life, and communities on the downgrade.**

12. What interest has the farmer in the forests?

Nearly one-third of all our commercial forest land is in farm ownership. Some $3\frac{1}{2}$ million farmers own woodland acreage. Many farmers derive substantial income from the sale of woods products. Cutting, skidding, and hauling woods products affords opportunity for profitable employment during periods when other farm work is slack. In addition, farm woodlands yield fuel, posts, and other products for home use. On many farms, however, the woodlands have been so mistreated that no income can be expected for many years.

With proper management, farm woodlands can play an important part in successful farming, yielding steady returns over the years. And farm woodlands can play an important part in the national welfare as one of the major sources of forest production. The average farmer, however, is not an expert lumberman or forester. He is often at a disadvantage in dealing with timber buyers, accepting lump-sum payments far below actual value, and allowing his woods to be "high-graded" or clear-cut. It is to the interest of farm woodland owners that expert forestry guidance be available and that good forest management be the general practice.

Whether his farm includes forest land or not, the farmer has a stake in the forests. He must have lumber for farm buildings, fuel wood, posts, poles, and other forest products for various farm operations. Much of his produce is shipped in wooden, or paper (made from wood) containers. The condition of the forests on the

hills may affect his water supply. Irrigation—the life-blood of agriculture in the West—is largely dependent upon forest-protected watersheds.

13. What interest has the average citizen in the forests?

Whether he lives in the backwoods or in a crowded city, regardless of occupation or activity, every citizen is concerned with the welfare of the forests. He may be inclined to take most things for granted—his newspaper, his easy chair, the water that flows from his kitchen tap—without stopping to think that they come from the forest. Forests provide the raw materials for countless products essential to modern living. Most American homes are built of wood; all have some wood in their construction. Furniture, books, magazines, radio cabinets, baseball bats, rolling pins, turpentine for paints, and rosin for soaps are products of the forest. Plastics, rayon, sausage casings, and photographic film are some of the newer products made from wood. Forest products paid the third largest freight bill before the war. And the railroad lines are laid on wooden ties. More than 10,000 products of wood have been listed, and wood enters in some degree into the manufacture, processing, or delivery of practically all other products. The Army says that wood is required for some 1200 different items of military equipment. Modern technology is constantly developing new uses for wood, and the prospects are that our needs for timber will increase in the future.

Well-managed forests on the watersheds can conserve water supplies, help to reduce floods, and regulate stream-flow. Forests are the home of much of our wildlife; they provide scenic beauty and afford recreational opportunities for millions.

Forests are the principal economic support of hundreds of communities. When the trees are gone, the mills shut down, payrolls stop, homes are lost, and towns decay. Some of the worst areas of unemploy-

ment, tax delinquency, and business shut-downs have been areas where all the timber was cut out.

FOR THE FUTURE

14. Can our forests be made to supply all our timber requirements?

Expert foresters have stated that if proper cutting and related forest practices are applied, America's urgent war needs can be met without further impairing the productivity of American forest lands.

In the long view, the United States Forest Service says that the potential timber-producing capacity of the forest land in the United States is sufficient to supply all our prospective needs for timber, with a margin for export.

One-sixth of our commercial forest land, however, is now virtually nonproductive. More millions of acres are producing only a fraction of potential capacity. **America's forest lands can assure ample and continuous forest products only if sound forest practices are applied.** This means that a very material improvement over the general level of present practices must be achieved.

15. How can all forest lands, regardless of ownership, be kept productive?

The United States Department of Agriculture and the Forest Service have recommended a comprehensive action program to accomplish this. Right now the most urgent thing is to win the war. It may be impractical to implement the complete forestry program at this juncture, but it should be planned now and fully effectuated just as soon as practicable.

The program recommended includes:

(1) **Public regulation.**—The most urgent need is to stop destructive cutting. It is generally recognized that the public has the right and duty to insist that our forest land, regardless of ownership, be kept in pro-

ductive condition. Public regulation to prevent destruction by forest fire has widespread approval. Public control to prevent destruction by improper cutting and other destructive practices on private land is equally essential. Action along this line has been recommended by the Department of Agriculture, and by a Joint Congressional Committee appointed to study the forest problem.³

Current discussion centers largely around what form such control should take—whether direct regulation of timber cutting and other closely related practices by the Federal Government, or control by the individual States. Federal regulation is generally opposed by the organized forest-products industry. It is obvious, however, that no regulatory measure can be effective for the country as a whole without over-all Federal leadership in setting the basic standards of forest practice and of enforcement. The Forest Service also believes Federal cooperation in financing the cost of administration to be advisable.

To assure satisfactory standards of forest regulation and Nation-wide application, basic Federal legislation would be required. Such legislation would set up certain broad standards of forest practice, such as prohibiting stripping the land of every usable tree, except under special circumstances; prohibiting premature or wasteful cutting in young stands; providing for protection against fire, insects, and disease, and regulating grazing to prevent damage to trees and to protect the watershed; and providing for the reservation of sufficient growing stock of desirable trees to keep the lands reasonably productive.

Under such a plan, if States did not within a reasonable length of time enact and carry out satisfactory regulatory measures, the Federal Government would act directly to undertake regulation within those States.

Specific rules of forest practice would be formulated with the help of local advisory boards so as to meet the

³ UNITED STATES CONGRESS, SENATE, JOINT COMMITTEE ON FORESTRY. FOREST LANDS OF THE UNITED STATES. 77th Cong., 1st sess., Sen. Doc. 32. 1941.



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BAD TIMBER CUTTING. Because of destructive methods of cutting, this woodland area will be unproductive for many years.

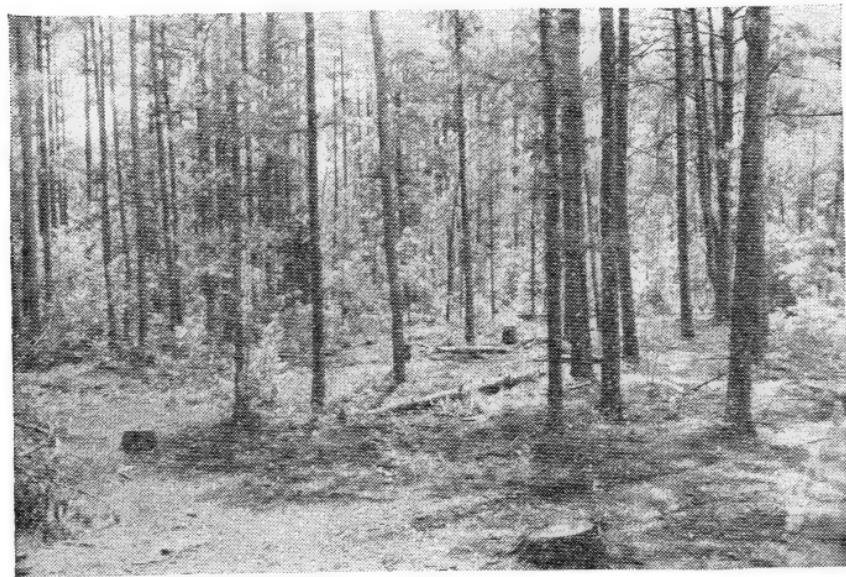
various forest conditions and requirements of different localities and situations. At the outset the Secretary of Agriculture would set up a representative advisory council at the national level through which the groups most directly concerned in the application of the law could express their views on any phase of its administration.

This type of public regulation would not require as high standards as generally obtain on the national forests or as those already adopted by many of the more

progressive owners. It would not of itself bring about the most desirable type of forest management. But it would prevent further destructive exploitation of our forest resources. And it should bring order out of chaos and supplant suspicion on the part of industry by whole-hearted cooperation for the common good.

The Forest Service believes that such public regulation will prove to have a most effective educational value in promoting better forest management. It recognizes, however, that arbitrary application as a punitive measure would doom it to failure.

(2) Public aid to private owners.—As another part of a national program of forest conservation, the Forest Service and other conservation agencies have recommended expansion of public aid to private owners in fire protection, insect and disease control, research in woods management and wood utilization problems, and other cooperative aids.



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GOOD TIMBER CUTTING. A selective cutting of timber for pulpwood has been made in this stand. Plenty of growing stock has been left for the future.

Public cooperation should encourage private enterprise in forestry in every legitimate way, helping it to provide the production, employment, and security upon which the welfare of the people depend. Public service in the field of scientific research already has pointed the way to improved techniques in forest management and to better ways of manufacturing and using forest products. It has made possible the saving of millions of dollars. The value of a continuing, thoroughgoing research program can hardly be overestimated.

More technical advice in forest management and in wood utilization problems should be made available to timber owners and operators. Government assistance should be provided in the establishment of cooperative marketing associations by forest land owners. Better credit facilities should be available to meet the needs for long-term loans for forest owners striving to build up depleted properties and practice permanent timber growing. Property taxation should be adjusted so as not to impose inequitable burdens on owners of growing timber. Government aid in fire protection, and in the control of destructive insects and tree diseases should be strengthened.

Such public cooperation would help private owners make the transition from destructive methods of cutting to continuous production, and encourage them to go beyond the minimum requirements set up by public regulation and practice the best kind of forest management.

(3) Public forests.—The productivity of some forest lands is too low to provide adequate incentive for private owners to attempt to grow timber on them. Other lands lie in such rough or inaccessible country that they have little attraction for the owners after the original timber is cut; and still other lands have been so denuded as to offer no prospect of income for many decades. Many such lands are chronically tax delinquent. There are also certain areas where acute problems of watershed protection, or need for protection or development of recreational and scenic values, or other public interests outweigh the interests of a single owner.

For all such lands, public purchase and administration is the logical answer. It has been estimated that some 90 million acres should be acquired by the Federal Government and administered as national forests. For perhaps another 50 million acres, State or community ownership seems desirable.

The adjustments involved in this inevitable extension of public land ownership will be easier and the problems of restoration simplified if the necessary acquisition by the public can be carried forward rapidly and systematically.

A necessary corollary of public ownership of timber-lands, of course, is adequate provision for the protection, development, and utilization of the public forests.

16. Would public forest regulation conflict with freedom of enterprise?

Regulatory measures which would serve to keep our remaining forests productive, and restoration of the growing stock on our depleted forest lands, would greatly enlarge the field for private enterprise. New opportunities for business activity would be opened up, and new sources of national income developed.

Regulation of timber cutting practices would of course mean some restriction on what a man might do on his own property. It would by no means be the first or only such restriction, however. The railroads, the public utilities, radio broadcasting, the meat-packing industry, industrial labor, and many other activities are subject to Federal regulation. The right of the public to restrict or prevent actions detrimental to public welfare is long established. We do not allow a man to make his place a public nuisance, or a source of damage to his neighbors. We require him to get a permit and to comply with building restrictions and zoning laws if he wants to build a residence or construct a warehouse.

Destructive timber cutting may have far-reaching effects. It may dry up a neighbor's water supply, or contribute to flood damage hundreds of miles away. It

may undermine the welfare of whole communities. It may deprive us of material that may later be essential for national defense and security (our armed forces use a greater tonnage of forest products than of steels). It is to the public interest therefore that our forest lands, regardless of ownership, be properly handled.

The forest-regulation measures that have been recommended would not restrict any forest land owner from cutting when or as fast as he wanted to, nor would they require him to cut if he did not want to. They deal only with preventing forest destruction and deterioration and keeping the land reasonably productive,—matters of great public concern. They would simply provide that if the owner did cut, he must cut according to the rules. Certain "rules of the game" are necessary in any enterprise. Private timber cutting, however, has so far lacked adequate rules.

17. Can forest work contribute to postwar employment?

If the program suggested in question 15 were in effect, aside from furnishing more security for present forest industries and the millions of dependent workers, it would ultimately develop the possibilities for hundreds of thousands of permanent new jobs based upon an increasingly productive natural resource.

Meanwhile, the forests offer large opportunities for employment for many thousands of those who will come out of our armed forces and war industries, pending the time they can get other work and permanent jobs. A vast amount of work is needed to restore depleted forest areas to productivity and to improve and expand the facilities for forest protection and management. Measures to improve timber growth, development of forest research and administrative facilities, and new forest recreation facilities are desirable. Public work along these lines would help to make the one-third of our Nation which is forest land supply a continuous abundance of products and services for the welfare of our citizens.

